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METHOD AND SYSTEM FOR TRANSMISSION AND FREQUENCY DOMAIN EQUALIZATION FOR WIDEBAND CDMA COMMUNICATIONS

ABSTRACT OF THE DISCLOSURE

The invention provides a method and system for transmission and frequency domain equalization for wideband CDMA communications by providing at least one spread sequence portion, and inserting a cyclic redundancy to the spread sequence to form a transmitted baseband sequence. The invention further provides a method and system for converting a plurality of receive samples from at least one spread sequence portion into a plurality of frequency domain samples, determining a plurality of frequency domain equalization weights for the frequency domain samples, and determining a time domain signal estimate based on the frequency domain equalization weights and frequency domain samples.